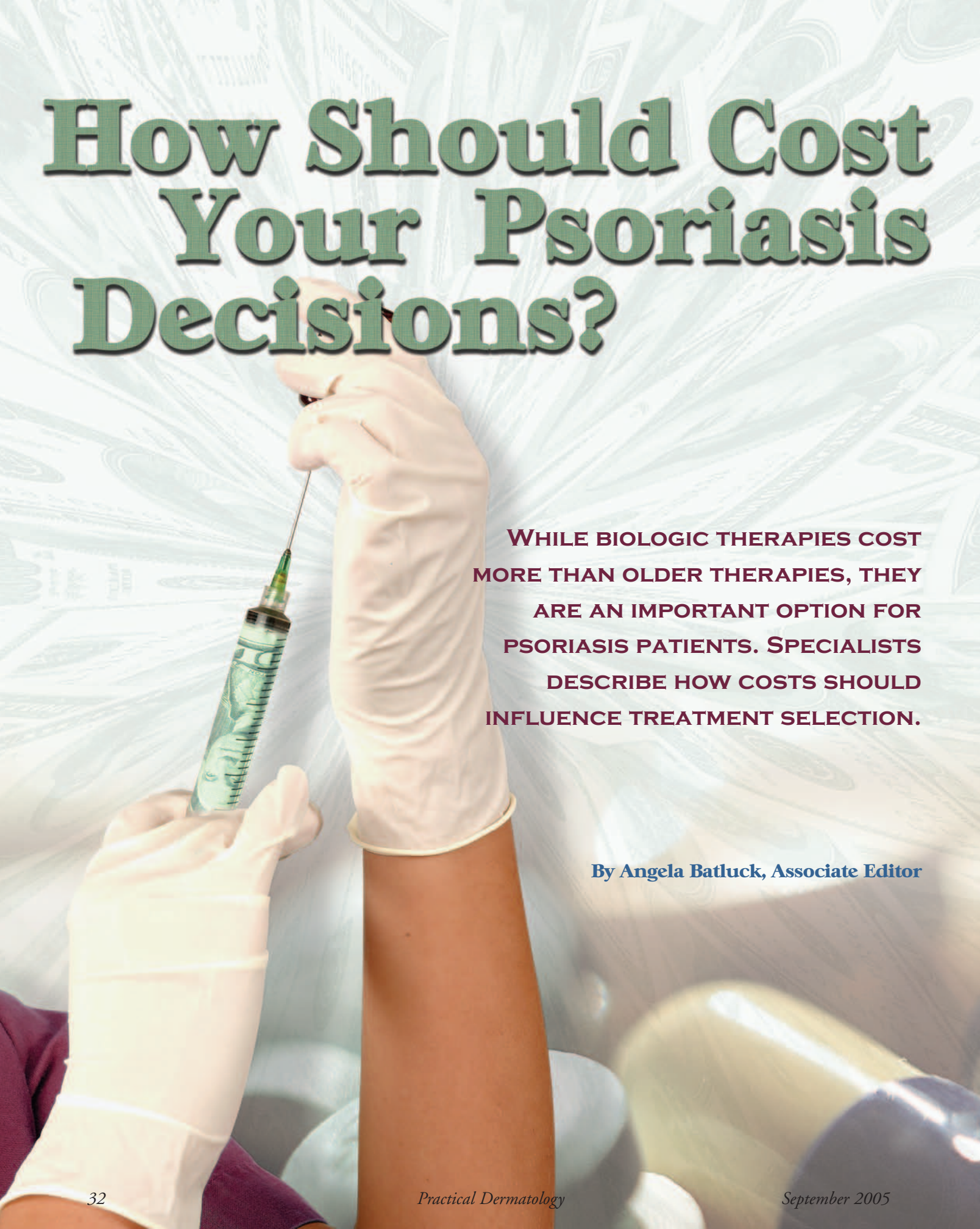
How Should Cost Your Psoriasis Decisions?



While biologic therapies cost more than older therapies, they are an important option for psoriasis patients. Specialists describe how costs should influence treatment selection.

By Angela Batluck, Associate Editor

Influence Treatment

Since FDA approval of the first biologic therapy Amevive (alefacept, Biogen Idec) for plaque psoriasis in January 2003, dermatologists have welcomed the biologics into the psoriasis armamentarium. The side effect profile of the biologics is particularly appealing to dermatologists and patients, while reports of some biologic-treated patients achieving PASI-90 offer new hope to those burdened by the physical, social, and psychological effects of the disease. However, access to the biologics continues to be a challenge for many patients, either due to prior authorization hurdles or financial barriers of high co-pays.

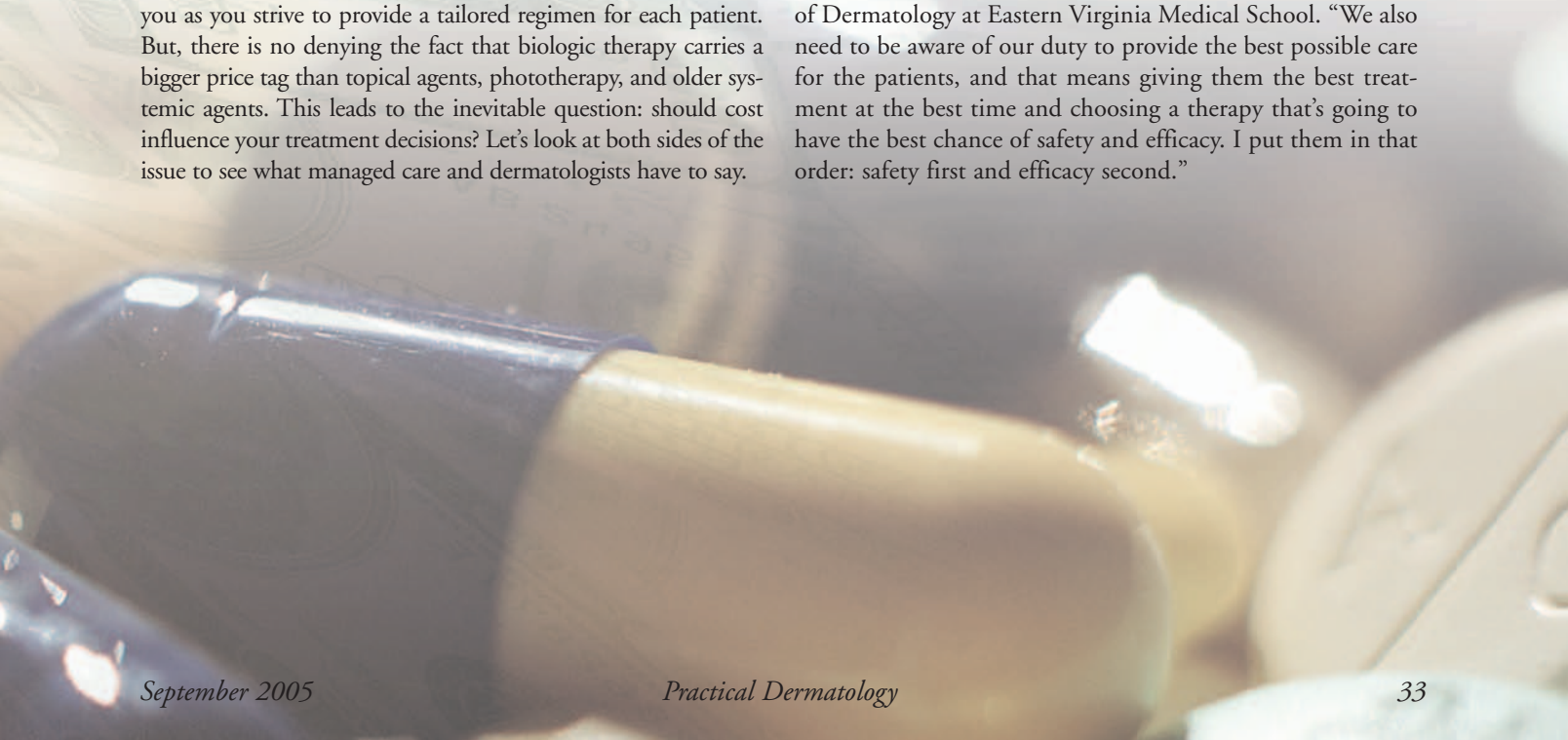
While not all moderate to severe psoriasis patients are candidates for a biologic therapy, concerns regarding cost have led managed care organizations to limit access, even for those patients who are candidates. It's a challenge dermatologists continue to encounter, and dermatologists each have their own frustrating real-life example: the pregnant patient denied coverage because she did not complete a course of PUVA or methotrexate, the 12-year-old patient denied coverage because of his age, the retired patient who cannot afford the co-pay.

At times, it may seem as if managed care is working against you as you strive to provide a tailored regimen for each patient. But, there is no denying the fact that biologic therapy carries a bigger price tag than topical agents, phototherapy, and older systemic agents. This leads to the inevitable question: should cost influence your treatment decisions? Let's look at both sides of the issue to see what managed care and dermatologists have to say.

Cost: The New Factor

Although the price of a medication has always been a topic of discussion with patients, until recently cost was not a *significant* factor in treatment decisions for the majority of psoriasis patients, likely due to the rather comparable costs of older agents and their significantly lower cost relative to biologics. In fact, a recent study estimates the annual costs for conventional systemic agents methotrexate (15mg/wk) and cyclosporine (3mg/kg/d) are $1,190 and $5,019, respectively.[1] In contrast, another study estimates the annual cost of biologic therapy ranges from $20,000 to over $35,000 (Table 1).

When looking at psoriasis treatments strictly in terms of these figures, it's no surprise that managed care has made access to these newer agents challenging. But, as dermatologists recognize, it's neither realistic nor ethical to make decisions on the basis of cost alone. Safety and efficacy have long been the guiding factors for clinicians, yet the cost of newer therapies has some dermatologists now factoring in cost. "Yes, physicians need to be aware of cost," says psoriasis specialist David M. Pariser, MD of Pariser Dermatology and Professor of Dermatology at Eastern Virginia Medical School. "We also need to be aware of our duty to provide the best possible care for the patients, and that means giving them the best treatment at the best time and choosing a therapy that's going to have the best chance of safety and efficacy. I put them in that order: safety first and efficacy second."



Managed Care's Perspective

In making formulary and policy decisions, managed care organizations consult peer-reviewed literature for evidence of safety and efficacy; the biologics are no exception. Dermatologists, too, look to the literature for guidance on new therapies and regimens. Unfortunately, the dearth of head-to-head trials comparing the safety, efficacy, as well as cost of oral systemic agents, phototherapy, and biologic agents makes it difficult to distinguish which treatments are the most cost-effective and safe. To date, only one published study[1] comparing these factors exists, helping to bring this issue of cost into perspective. Undoubtedly, this study will influence future policy decisions, but it also offers insight to dermatologists who are factoring cost into their treatment decisions.

By reviewing peer-reviewed published literature from 1966 to 2004, the study's panel of experts—which included a dermatologist and several managed care decision makers—assessed the efficacy of broadband UVB, narrowband UVB, PUVA, UVB/acitretin, PUVA/acitretin, acitretin, cyclosporine, methotrexate, alefacept, efalizumab (Raptiva, Genentech), etanercept (Enbrel, Amgen/Wyeth), and infliximab (Remicade, Centocor) on the basis of PASI scores. The analysis considered only randomized, clinical controlled trials that met strict inclusion criteria set by the Expert Panel. To determine cost-effectiveness, the authors divided total annual cost for each treatment by efficacy (PASI), as reported in peer-reviewed literature. The total cost not only included the cost of the medication or light treatment but also administration costs (e.g. in-office injection), monitoring costs (e.g. labs, biopsies, etc), and costs associated with adverse events (e.g. atorvastatin for hyperlipidemia following acitretin) for one year. "What we came up with was a cost effectiveness unit: what does it cost to achieve one percent improvement in PASI?" explains Cheryl S. Hankin, PhD, lead author and President and Chief Scientific Officer at BioMedEcon in Moss Beach, CA. "We found an extremely wide range in cost-effectiveness ratios across treatments."

The cost to achieve one percent PASI improvement ranged from $31 for methotrexate (7.5mg) to $602 for alefacept (15mg) (Table 2), and by multiplying these figures by 50 or 75, the study calculated the total cost of care to achieve PASI-50 and PASI-75. Conventional systemics and phototherapy with or without acitretin stood out as the most cost effective treatments for moderate to severe psoriasis, says Dr. Hankin, noting that the key drivers of cost-effectiveness were cost and efficacy. "The administration of the treatment, the monitoring, and the adverse events really contributed very little to the total cost of care," she explains.

What this means in clinical practice, says Dr. Hankin, is that dermatologists should base treatment decisions on empirical evidence. She says that data fail to provide compelling justification for more costly treatments as first-line therapy. "The empirical

Table 1. Estimated Annual Cost of Biologic Therapies*

Adalimumab –based on every other week treatment	$20,459
Alefacept –based on 2.33 courses/year (one treatment course: every week for 12 wks. Followed by 12 wk. rest)	$35,565
Efalizumab –based on weekly treatment	$20,445
Etanercept –based on 50mg 2x/week for 1-3 months, then 1x/week	$21,869
Infliximab –infusions every 2 months	$29,135

Note: Cost includes drug, labs, office visits, drug administration expenses, etc.
*Abramovits W. Comparison of Biologic Therapies for the Treatment of Psoriasis. Presented at the American Academy of Dermatology's Summer Academy, Chicago, 2005.

Table 2. How much does it cost to achieve PASI1?[1]

Methotrexate (15mg)	$33
Broadband UVB+Acitretin (25mg)	$55
PUVA+Acitretin (20mg)	$76
Cyclosporine (1.5mg/kg)	$141
Acitretin (50mg)	$216
Infliximab (5mg/kg)	$319
Etanercept (50mg)	$330
Efalizumab (1mg/kg)	$346
Alefacept (15mg IM)	$602

Adapted from Hankin et al, 2005

Table 3. Annual Cost of Light Therapies[1*]	
Broadband UVB (3x/week, 12 weeks) + maintenance (2x/week, 40 weeks)	$4807
Narrowband UVB (3x/week, 6 weeks) + maintenance (2x/week, 46 weeks)	$4558
UVB/acitretin** (UVB 5-7x/week, 12 weeks; acitretin 25mg/day, 12 weeks) + maintenance (UVB 1x/every other week; acitretin 25mg every other day, 40 weeks)	$3792
PUVA (4x/week for 6 weeks, then 2x/week for 2 weeks) + maintenance (1x/week, 44 weeks)	$3737
PUVA/acitretin (acitretin 40mg/day, 2weeks; then 20mg/day plus PUVA 3x/week, 8 weeks) + maintenance (PUVA 1x/every other week and acitretin reduced to 25mg every other day for 42 weeks)	$6773

* Does not include cost of commercial tanning bed
Hankin et al, 2005

evidence would suggest a stepwise consideration for a new patient, where they [dermatologists] would consider stepwise using the lower cost, maybe older drugs that are extremely effective and then moving up the scale as needed," says Dr. Hankin. In addition, she encourages dermatologists to abandon the belief that failure of one non-biologic agent should lead to immediate initiation of a biologic therapy.

For patients who are candidates for a biologic therapy, Dr. Hankin says it's too early to tell which biologic stands out as the most cost-effective. "The long-term data, with respect to safety and efficacy, as far as I'm concerned, aren't strong enough for me to recommend one over another," she notes.

Dermatologists' Perspective

Whether or not you agree with the above conclusions, it is important to recognize that such data will inevitably influence future managed care decisions. It's also helpful to consider how psoriasis experts fit cost into their treatment decisions and how they decide which patients are candidates for biologic therapy.

"The question that has to be answered is: are the biologics clearly a better choice than well-established and less expensive agents with which we have had decades of experience?" says Robert E. Kalb, MD, a Buffalo-based psoriasis specialist and Clinical Associate Professor of Dermatology at State University of New York at Buffalo. "The problem is that there are no head-to-head studies. It's difficult to compare various treatment effectiveness."

While he believes the cost-effectiveness study led by Dr. Hankin provides guidelines, Dr. Kalb makes two observations that he encourages dermatologists to keep in mind when looking at the data. First, variability in PASI scores for each treatment must be taken into account. For example, "the PASI scores for broadband UVB ranged from 47 to 84 percent. The number you assign that [broadband UVB] in the cost analysis obviously has huge implications," says Dr. Kalb. Second, keep in mind that recent and forthcoming data can and will offer new information about PASI scores for the biologics. "Some of the numbers for the biologic agents may actually be higher than what has been reported in the study," explains Dr. Kalb.

Although Dr. Pariser believes the recently published cost-effectiveness study provides the best available data to date, he cautions , "I think the distinction between cost per improvement of PASI might be a little bit heavily weighted toward the non-biologics." Comparing clinical trials of the biologics to clinical trials of the pre-biologics is problematic for several reasons and in Dr. Pariser's opinion is like comparing apples to oranges. Recent clinical trials for the biologics are well executed double-blind, placebo-controlled trials, he explains, in which PASI scores are assessed by experienced raters. "Almost all of the studies in the pre-biologic days are not studies that are done to the same rigor that the current new studies are," observes Dr. Pariser. Furthermore, few to no placebo-controlled, blinded trials exist for the pre-biologic systemic or light therapies. "Since there aren't any blinded controls of the pre-biologics, you really should compare the open label trials of the biologics to the pre-biologics," says Dr. Pariser. In addition, he notes that efficacy rates tend to be higher in open-label trials.

Although we do not yet have a study comparing cost-effectiveness based on open label trials, Dr. Pariser believes cost should be a factor in treatment decisions. Cost, of course, encompasses not only the financial cost to the healthcare system (e.g. medications, monitoring/lab tests, follow-up visits, etc) but also the cost to society resulting from psoriasis patients missing work or being less productive because their quality of life is impaired. All of these costs are important, but in reality, a patient is really concerned about the cost of his/her co-pay and the cost of his/her follow-up visit, says Dr. Pariser. Although not addressed in Dr. Hankin's study, Dr. Pariser says the cost of follow-up "in the practical world of treating patients may in fact be a more compelling reason to use one treatment versus another than what's the overall cost to the healthcare system."

Real World Decisions

If cost of therapy should play a role in treatment decisions, what does that mean for the biologics? "The advent of biologics has certainly greatly enhanced the options for patients who have moderate or severe psoriasis, particularly those who have been on traditional systemics and either have not done well or who have had some side effect or contraindication to their use. From that aspect, it really has ushered in a sort of 'new day' in the treatment of psoriasis," says Dr. Pariser. "That's not to say the older, pre-biologic agents are prehistoric. In fact, there's still a reasonably defined and certainly beneficial place for them in our treatment armamentarium."

In fact, neither Dr. Kalb nor Dr. Pariser views biologics as first-line therapy for most of their moderate to severe psoriasis patients. Dermatologists have discovered that most insurance companies require patients to fail one or two treatments before granting authorization for biologic therapy. Dr. Kalb believes this requirement is practical for most patients due to the cost of the biologics, and with most patients, he begins with a course of methotrexate or phototherapy with or without acitretin before considering biologic therapy.

Ultimately, however, psoriasis treatment must be tailored to each patient, and consideration of the following three factors can help guide treatment decisions, says Dr. Pariser.

Medical Factors. Without doubt, safety and efficacy deserve first consideration. When you compare the biologics to the pre-biologics strictly in terms of medical factors, Dr. Pariser says, "Safety and efficacy wise: the efficacy is equivalent, the safety is better [for biologics]." That's not to say the safety profiles of the pre-biologics should have you ruling them out as treatment options. Dermatologists have been using these drugs for years and know which patients are contraindicated, what to expect, and what to monitor over the course of treatment. It comes down to answering two questions, says Dr. Pariser. First, are there any drugs that are contraindicated for the patient? Second, which treatment is likely to produce the best improvement for this particular patient?

For psoriatic arthritis patients, conventional therapies are less effective than the biologics, says Dr. Kalb, and he encourages dermatologists to consider TNF-blocking agents etanercept, infliximab, or adalimumab (Humira, Abbott) for these patients.

Price Check: What Do Therapies Cost?

To get a general sense of drug costs, we priced out topical and systemic therapies at drugstore.com.* The prices below reflect the website's published prices for out-of-pocket costs. Prices at other retailers will vary.

Topical	Brand	Generic
Class I steroid (0.05% halobetasol propionate cream, 15gm tube)	$37.10	$19.99
Class II steroid (0.25% desoximetasone cream,15gm tube)	$36.29	$12.58
Class III steroid (0.1% amcinonide cream,15gm tube)	$24.99	$20.99
Class IV steroid (0.1% mometasone furoate cream, 15gm tube)	$31.30	$21.99
Class V steroid (0.2% hydrocortisone valerate cream, 15 gm tube)	$21.99	$20.38
Class VI steroid (0.05% desonide cream, 15gm tube)	$28.07	$10.99
Calcipotriene (0.005% cream, 60gm tube)	$122.08	–
Tazarotene (0.05% cream, 60gm tube)	$190.85	–
Tazarotene (0.1% cream, 60gm tube)	$199.58	–
Tacrolimus (0.1% ointment, 60gm tube)	$129.56	–
Pimecrolimus (1% cream, 60gm tube)	$117.23	–
Oral		
Methotrexate (2.5mg tablets, 90 tablets)	$77.98	
Acitretin (25mg capsules, 90 capsules)	$1,383.89	
Cyclosporine (100mg tablets, 90 tablets)	$478.18	

*www.drugstore.com as of August 12, 2005

Are Canadian Drugs Really Cheaper?

It's widely held that purchasing drugs from Canada may save patients money, but when it comes to psoriasis treatments, that may not always be the case. We checked out prices at PharmacyChecker.com* to see how US and Canadian prices stack up for two popular therapies.

Methotrexate (2.5mg tablets, 100 tablets)		$79.80 @ Adv-Care.com, Canada
		$47.25 @ PrescriptionPoint.com, USA
Calcipotriene (0.005% cream, 60gm tube)		$76.83 @ CanadaMeds.com, Canada
		$130.29 @ Costco.com, USA

*www.pharmacychecker.com as of August 12, 2005.

Social Factors. Social factors also deserve consideration, particularly the "convenience" factor. Phototherapy is a cost-effective option for many patients, but it's not always a practical or physically possible option, notes Dr. Pariser. Your retired psoriasis patient may have no difficulty coming three days a week for treatment, but a patient who works 40 hours a week may find it impossible to fit phototherapy sessions into their schedule.

Cost Factors. After considering the medical and social factors, Dr. Pariser presents the treatment options to his patients. More often than not, patients reply with, "Which is going to cost me more?" Dr. Pariser says, "I can fully understand how managed care plans cannot pay for biologics for everybody with moderate to severe psoriasis. The dilemma is how do you select the ones to pay for." Managed care has attempted to solve this dilemma in two ways. "They have either put up medical barriers, in terms of formulary inclusion and exclusion, or they've put up financial barriers," explains Dr. Pariser. While many health plans now cover biologics, Dr. Pariser finds they limit access by cumbersome algorithms or high co-pays. A co-pay of 15 or 20 percent makes the biologics beyond the reach of most patients.

Insurance barriers may also arise with phototherapy. "Most insurance plans charge a co-pay for every visit," says Dr. Pariser. "A patient is coming in three times a week and has a $30 or $40 co-pay–that's $30 or $40 times three a week. There are a lot of people who just can't afford that."

Choosing a Biologic Therapy

If you've weighed the above factors and decide a biologic agent is the best intervention for a patient, you are then left with the decision of choosing a biologic therapy. While etanercept, infliximab, or adalimumab are good options for psoriatic arthritis patients, these TNF agents are not the best options for you patients with a history of multiple sclerosis or other neurologic conditions. Once you've ruled out tuberculosis, deciding which biologic to use comes down to patient preference and insurance coverage. Specifically, determine the patient's preference regarding at-home therapy (efalizumab, etanercept, adalimumab) or in-office therapy (alefacept, infliximab), recommends Dr. Kalb. Also, take into consideration whether a patient prefers intermittent therapy (alefacept) or continuous therapy (efalizumab or etanercept), Dr. Kalb adds.

For Dr. Pariser, the decision often comes down to cost. "If the patient has no contraindication to any particular one, then the decision in my practice is driven by what is going to cost the patient the least in terms of their co-pay," he states.

What It All Means

The physical, psychological, and social burdens of psoriasis are well recognized by dermatologists. In fact, the disease's impact on quality of life often justifies more aggressive treatment. While conventional systemic agents and light therapy are effective and safe for many patients when appropriately used and monitored, the pre-biologics are not appropriate for all moderate to severe psoriasis patients. However, the cost of the biologics places a financial burden on patients that may make biologic therapy unattainable for some patients. Future studies may show the efficacy and safety of the biologics outweighs the safety and efficacy of the pre-biologics. Until then, many dermatologists will continue to balance efficacy, safety, and cost.

1.Hankin CS et al. A cost comparison of treatments of moderate to severe psoriasis. Drug Benefit Trends 2005;17:200-14.

Reimbursement Assistance for Biologic Therapy

National Psoriasis Foundation
www.psoriasis.org/advocacy/assistance/insurance/index.php
E-mail: insurance@psoriasis.org
Phone: 1-800-723-9166

Amevive (Biogen Idec)
www.amevive.com
Phone: 1-866-AMEVIVE

Enbrel (Amgen/Wyeth)
www.enbrel.com/enliven/enbrelenliven-insurance.jsp
Phone: 1-888-4ENBREL

Raptiva (Genentech)
www.spoconline.com/spoconline/raptiva/channel.jsp
Phone: 1-877-RAPTIVA

Remicade (Centocor)
www.remicade.com/global/getting_support/insurance_information.jsp
Phone: 1-800-964-8345